

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1- 18 (Cancelled)

19. (New) A method for reducing or preventing the invasion and infection of mammalian cells by pathogens, and for combating diseases caused by such pathogens comprising administering to a mammal an effective amount of cycloglycans having a ring-shaped base structure of 2 to 40 monosaccharides in the ring, which is unsubstituted or may be derivatized at the monosaccharides forming said ring, by one or more monosaccharides(s) or disaccharide(s) and/or one or more functional group(s), wherein the total number of the monosaccharides making up the molecule of the cycloglycans is 2 to 250, and said cycloglycans may also be bound to an inert carrier or may be immobilized thereon.

20. (New) The method of claim 19, characterized in that the cycloglycans are homopolymeric cycloglycans and/or the ring of the cycloglycans is made up of 6 to 40, and in particular 6 to 20 monosaccharides.

21. (New) The method according to claim 19, characterized in that the ring of the cycloglycans is made up of D-fructose, D-mannose, L-fucose, D-N-acetyl glucosamine, D-N-acetyl galactosamine, D-xylose, sialic acids, L-rhamnose, D-arabinose, D-allose, D-talose, L-idose, D-ribose, D-galacturonic acid, altrose, D-galactose and glucoses,

22. (New) The method according to claim 19, characterized in that one, two or all of the following criteria are met:

i) the cycloglycans are derivatized at one or more of the monosaccharides forming the ring by one or more of the following monosaccharide groups bound thereto in a glycosidic linkage: D-fructose, D-mannose, L-fucose, D-N-acetyl glucosamine, D-N-acetyl galactosamine, D-xylose, sialic acids, L-rhamnose, D-arabinose, D-allose, D-talose, L-idose, D-ribose, D-galacturonic acid, altrose, D-galactose and glucoses;

ii) the cycloglycans are derivatized at one or more of the monosaccharides forming the ring, by one or more of the following disaccharide groups bound thereto in a glycosidic linkage: lactose, maltose, sucrose and galacto-N-acetyl glucosamine;

iii) one or more of the OH groups of one or more of the monosaccharides forming the ring is or are substituted by an NH_2 group, SH group, phosphate group, sulfate group, nitrate group, alkyl group, hydroxyalkyl group or carboxyalkyl group;

iv) one or more of the OH groups as well as of the - if present - NH_2 and SH groups of the monosaccharides forming the ring are derivatized in the form of ethers, esters, amides and imines.

23. (New) The method according to claim 19, characterized in that the linkage of the monosaccharides in the ring is α -glycosidic or β -glycosidic, with the β -glycosidically linked monosaccharides in particular being periplasmic glycans.

24. (New) The method according to claim 19, characterized in that the cycloglycans have 6, 7 or 8 monosaccharides and in particular glucose units in the ring.

25. (New) The method according to claim 19, characterized in that the cycloglycans are the following:

α -cyclodextrin, β -cyclodextrin, γ -cyclodextrin; cyclofructines, cyclo-mannines, cyclogalactines and cycloaltrines, which may be derivatized in the manner described in claim 22.

26. (New) The method according to claim 25, characterized in that the derivatized cycloglycans are glucosyl- α -cyclodextrins, maltosyl- β -cyclodextrins and hydroxypropyl cyclodextrins.

27. (New) The method according to claim 19, characterized in that the carrier is a peptide, a protein, a lipid, a lipoid, a polymer or a biopolymer.

28. (New) The method according to claim 19, characterized in that the cycloglycans are incorporated into a fluid or solid food composition, a dietetic composition or a pharmaceutical composition for administration to a human or an animal, or serve for preparing such a composition.

29. (New) The method according to claim 29, characterized in that the composition serves for an oral, lingual, nasal, bronchial, vaginal, topical (skin and mucosa) and per os administration, for an administration by means of a probe into the stomach of a human or an animal, or for an administration as an infusion.

30. (New) The method according to claim 19, characterized in that the cycloglycans are administered once daily in an amount of at least 1 mg per kg of body weight to a human or an animal.

31. (New) The method according to claim 19, for the prevention and treatment of infections of the gastrointestinal tract, blood system, respiratory passages, urogenital tract, as well as the nasopharynx, in particular in case of listerioses.

32. (New) The method according to claim 19, characterized in that the pathogens are invasive gram-positive and gram-negative pathogenic bacteria, in particular listeria, and pathogenic viruses.

33. (New) A food composition, dietetic composition or pharmaceutical composition containing a cycloglycan described in claim 19, or several such cycloglycans.

34. (New) A composition according to claim 33, characterized in that it may contain a further carbohydrate or more further carbohydrates, which are not a cycloglycan as described in claim 19, a further active agent or several further active agents and/or a further ingredient, which is known and suited for the corresponding composition, or more of such ingredients, wherein in the case of a pharmaceutical composition a usual auxiliary agent or several usual auxiliary agents, including diluents, moisturizing agents, thickening agents, flavoring agents, sweetening agents and carriers, may be present,

35. (New) A method of reducing or preventing the invasion and infection of mammal cells by pathogens, and of combating diseases in humans and animals caused by such pathogens, characterized in that at least one cycloglycan according to claim 19 is administered to a human or an animal, in particular in such an amount that at least 1 mg of cycloglycan per kg of body weight is supplied to the human or the animal once daily.